REMARKS

Claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34 are currently pending in the subject application, and are presently under consideration. Claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34 are rejected. Claims 16, 23, 26 and 30 have been amended. Favorable reconsideration of the application is requested in view of the amendments and comments herein.

I. Rejection of Claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34 Under 35 U.S.C. §112, First Paragraph

Claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34 stand rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Applicant's representative respectfully submits that the Examiner has failed to establish a *prima facie* case of non-enablement with respect to claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34. When rejecting a claim under the enablement requirement of 35 U.S.C. §112, the Examiner has an initial burden of setting forth a reasonable explanation as to why it is believed that the scope of protection provided by a claim is inadequately enabled by the description of the invention. *In re Wright*, 999 F.2d 1557, 27 U.S.P.Q.2d 1510, 1513 (Fed. Cir. 1993). In rejecting claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34, the Examiner merely states that the Applicant's have not disclosed how to use the claimed invention due to lack of expository support for the use of the invention as depicted in FIGS. 4-9. However, the Examiner has not identified any claimed feature for which the Specification lacks support. Accordingly, Applicant's representative respectfully submits that the Examiner has failed to establish a *prima facie* case of non-enablement with respect to claims 1, 3-9, 12-16, 18-23, 25-27, 30, 31, 33 and 34. Thus, withdrawal of this rejection is respectfully requested.

II.   Rejection of Claims 1, 3-9, 12-15, 26-27, 31 and 33-34 Under 35 U.S.C. §101

Claims 1, 3-9, 12-15, 26-27, 31 and 33-34 stand rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Withdrawal of this rejection is respectfully requested for at least the following reasons.

In rejecting claims 1, 3-9, 12-15, 26-27, 31 and 33-34, the Examiner notes that there is a two pronged test to determine whether a software process is valid: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing (See Office Action, Page 4). However, in rejecting claims 1, 3-9, 12-15, 26-27, 31 and 33-34, the Examiner fails to even allege that claims 1, 3-9, 12-15, 26-27, 31 and 33-34 fail both prongs of the two pronged test offered. Instead, the Examiner simply states the test and then attempts to argue that the claims do not disclose a specific and credible utility (See Office Action, Page 5).

Applicant's representative agrees that a two pronged test exists to determine the eligibility of patentable subject matter under 35 U.S.C. §101. However, claims 1, 3-9, 12-15, 26-27, 31 and 33-34 pass the first prong of the two-part test, namely, that the claims in question are in fact tied to a particular machine or apparatus. In particular claims 1 and 31 each recite a processor operative to execute computer executable instructions and a computer readable medium that stores the computer executable instructions. Thus, claims 1 and 31are tied to a particular machine that includes (1) a processor and (2) a computer readable medium. Therefore, claims 1 and 31, as well as claims 3-9, 12-15 and 33-34 depending therefrom, claim patentable subject matter under 35 U.S.C. §101.

Moreover claim 26 recites means for storing structured arguments, and means for processing executable instructions and accessing the means for storing. Thus, similarly to claim 1, claim 26 is also tied to a particular machine that includes (1) means for storing structured arguments (e.g., memory) and (2) means for processing executable instructions (e.g., a processor). Therefore, claim 26, as well as claim 27 depending therefrom, claims patentable subject matter under 35 U.S.C. §101.

Furthermore, Applicant's representative respectfully disagrees that claims 1, 3-9, 12-15, 26-27, 31 and 33-34 do not disclose a specific and credible utility. In rejecting claims 1, 3-9, 12-

15, 26-27, 31 and 33-34, the Examiner states, "it is unknown as to whether the depicted hypothesis [shown in FIG. 4] (whether or not North Korea is receiving long range missile assistance from Russia) represents a specific and credible real-world situation or nearly an imaginary scenario" (Office Action, Page 5). Applicant's representative respectfully submits that whether or not FIG. 4 represents a real world or imaginary (e.g., war game) scenario is immaterial. Both a war game and a real world scenario have specific and credible utility. For instance, a confidence value in a war game can be used by a participant in the war game to determine a course of action (e.g., simulate an attack on North Korea). Thus, whether or not the hypothesis shown in FIG. 4 is a "real world" scenario or a war game scenario, both scenarios have specific and credible utility.

For the reasons described above, claims 1, 3-9, 12-15, 26-27, 31 and 33-34 should overcome the rejection. Accordingly, withdrawal of this rejection is respectfully requested.

III.   Rejection of Claims 26 and 27 Under 35 U.S.C. §101

Claims 26 and 27 stand rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Withdrawal of this rejection is respectfully requested for at least the following reasons.

Claim 26 has been amended to recite means for processing <u>computer</u> executable instructions. Thus, the system recited in amended claim 26 is tied to a particular machine, namely a machine that includes means for storing a structured argument (e.g., memory) and means for processing computer executable instructions (e.g., a computer processor). Therefore, amended claim 26 recites patentable subject matter. Accordingly, claim 26, as well as claim 27 depending therefrom, is not rejectable under 35 U.S.C. §101. Thus, withdrawal of this rejection is respectfully requested.

IV.   Rejection of Claim 30 Under 35 U.S.C. §101

Claim 30 stands rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. Claim 30 has been amended to recite a set of computer executable instructions stored in a computer readable medium. Amended claim 30 thus has a scope similar to claim 16, which was not rejected under 35 U.S.C. §101. Accordingly, claim 30 claims patentable subject matter under 35 U.S.C. §101.

V.   Rejection of Claims 1, 3-9, 12, 16, 19, 20, 22, 25-27, 30, 31, 33 and 34 Under 35 U.S.C. §102(b)

Claims 1, 3-9, 12, 16, 19, 20, 22, 25-27, 30, 31, 33 and 34 stand rejected under 35 U.S.C. §102(b) as being anticipated by "*Argument Mapping with Reason!Able*", by van Gelder ("van Gelder"). Withdrawal of this rejection is respectfully requested for at least the following reasons.

Van Gelder fails to disclose a simulation function, as recited in claim 1 or means for altering, as recited in claim 26, that alters at least one parameter of a structured argument according to a predetermined series of values representing changes in the at least one parameter over a period of time, as recited in claims 1, 26. In rejecting claims 1 and 26, the Examiner contends that sections 4.5 and 4.6 of van Gelder discloses these elements of claims 1 and 26 (See Office Action, Pages 9 and 14). Applicant's representative respectfully disagrees. In particular, section 4.5 of van Gelder discloses that a simple range of discrete values for degrees of confidence could be replaced by a numerical scale. In claims 1 and 26, the predetermined series of values represents changes in at least one parameter over a period of time. There is nothing in the cited sections of van Gelder to indicate that the discrete values represent changes in at least one parameter over a period of time, in contrast to the predetermined series of values recited in claims 1 and 26. Instead, it appears that discrete values disclosed in section 4.6 of van Gelder simply represent numeric values that correspond to qualitative probabilities (e.g., definitely, probably, no verdict, probably false, definitely false; See van Gelder, table in Sec. 4.5). Accordingly, van Gelder fails to disclose the simulation function or the means for altering recited

in claims 1 and 26. Therefore, claims 1 and 26, as well as claims 3-9, 12 and 27 depending therefrom, should be patentable over the cited art.

Additionally, claim 6 recites a plurality of parameters comprising a plurality of influence values, wherein the influence parameters represent a degree of logical relatedness between respective associated first and second hypotheses. In rejecting claim 6, the Examiner argues that in van Gelder, "text inside the nodes" reads on the plurality of influence values recited in claim 6 (See Office Action, Page 22). Applicant's representative respectfully submits that the Examiner's interpretation fails to give claim 6 adequate patentable weight. A claim construction that gives meaning to all the terms of the claim is preferred over one that does not do so. *Merck & Co. v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1372, 73 U.S.P.Q.2D 1641 (Fed. Cir. 2005). Claim 6 explicitly distinguishes between influence values and hypotheses. Applicant's representative respectfully submits that in rejecting claim 6, the Examiner has failed to consider the influence values and hypotheses as separate entities, which would render the recitation of influence values superfluous. As noted, above, such an interpretation of claim 6 is contrary to current case law.

Moreover, "text inside the nodes" disclosed in van Gelder do not represent the degree of logical relatedness between respective associated first and second hypotheses, in contrast to the plurality of influence parameters recited in claim 6. Instead, the "text inside the nodes" simply state facts and conjectures (See e.g., FIG. 1 of van Gelder). Therefore, van Gelder fails to disclose the plurality of influence values recited in claim 6. Accordingly, claim 6 is not anticipated by the cited art.

Furthermore, claim 8 depends from claims 6 and 1 and recites that influence parameters are displayed as connectors between respective first nodes, representing an associated first hypothesis and respective second nodes, representing an associated second hypothesis, wherein the magnitude of the influence parameter is represented by at least one spatial dimension of the connector. In rejecting claim 8, the Examiner states, "Examiner interprets the strength of reasons to be a given influence parameter that is represented by at least one spatial dimension of the associated connector of the influence parameter" (Office Action, Page 24, citing FIG. 5 of van Gelder). Applicant's representative respectfully disagrees. In van Gelder, the strength of any

reason has no relationship to a spatial dimension of a connector, in contrast to the influence parameters recited in claim 8. For instance, in van Gelder, a first node with the statement "Socrates is a human" is connected to a second node with the statement "Socrates is a mortal." Nothing in van Gelder discloses that the spatial relationship between the first and second nodes (e.g., hypotheses recited in claim 1) represents a magnitude of influence.

Further, similarly to claim 6, Applicant's representative respectfully submits that in rejecting claim 8, the Examiner has failed to give claim 8 adequate patentable weight, particularly when claim 8 is read in light of its dependence from claims 6 and 1. Specifically, when claim 8 is read in light of its dependence from claims 6 and 1, claim 8 recites both confidence values for a plurality of hypotheses (which, in rejecting claim 1, the Examiner contends corresponds to "Strength of reasons/objections" disclosed in van Gelder; See Office Action page 19) and influence parameters that represent a degree of logical relatedness between respective first and second hypotheses. Thus, in rejecting claim 8, the Examiner is contending that the "Strength of reasons" disclosed in van Gelder reads on both, confidence values <u>and</u> influence values. Such an interpretation of claim 8 is not only contrary to current case law, it also fails to even consider what is disclosed in the Specification.

During patent examination, the pending claims must be given the broadest reasonable interpretation consistent with the specification. *In re Prater*, 415 F. 2d 1393, 162 U.S.P.Q. 541 (C.C.P.A. 1969). As an example, paragraph [0053]-[0054] of the Specification distinguishes between confidence values and influence values (parameters), as recited in claim 8. Confidence values are associated with a particular node (e.g., node 260 illustrated in FIG. 5), while influence parameters are associated with connectors between nodes (e.g., connector 278). That is, in light of the Specification, as well as the plain meaning of claim 8, the influence parameters and the confidence values recited in claim 8 are clearly independent quantities. Thus, Applicant's representative submits that claim 8 is not anticipated by the cited art.

Claim 16 has been amended to substantially incorporate the subject matter of claim 22, and to clarify the definition of an "influence value." Specifically, claim 16 has been amended to recite that an argument model comprises at least two contributing hypotheses, and that a

-14-

parameter comprises an influence value associated with a logical relatedness between the two contributing hypotheses, the influence value representing a degree of logical relatedness between the two contributing hypotheses. For reasons similar to those discussed above with respect to claims 8 and 6, no structure or process disclosed in van Gelder reads on the influence value recited in amended claim 16. Accordingly, claim 16, as well as claims 18-21 and 22 depending therefrom, are not anticipated by van Gelder, and therefore, claims 18-21 and 22 should be patentable over the cited art.

Additionally, for reasons similar to those discussed above with respect to claim 1, van Gelder fails to disclose providing a predetermined series of values into an argument such that at least one parameter is altered according to a predetermined series of values that represent changes in the at least one parameter over a period of time, as recited in claim 25. Accordingly, claim 25 is not anticipated by the cited art.

Amended claim 30 and claim 31 each recite a plurality of influence parameters representing the degree of logical relatedness between respective associated first and second hypotheses, wherein the influence parameters are displayed as connectors between respective first nodes representing associated first hypotheses and respective second nodes, representing associated second hypotheses. For reasons similar to those discussed above with respect to claims 16, 8 and 6, van Gelder fails to disclose any structure or process that reads on the influence parameters recited in claims 30 and 31. Accordingly, claims 30 and 31, as well as claims 33 and 34 depending therefrom should be patentable over the cited art.

For the reasons described above, claims 1, 3-9, 12, 16, 19, 20, 22, 25-27, 30, 31, 33 and 34 should be patentable over the cited art. Accordingly, withdrawal of this rejection is respectfully requested.

VI.   Rejection of Claim 13 Under 35 U.S.C. §103(a)

Claim 13 stands rejected under 35 U.S.C. §103(a) as being unpatentable over van Gelder in view of "*Graphical Explanation in Bayesian Networks*," 2000, by Lacave, et al. ("Lacave"). Claim 13 depends from claim 1, and is patentable for at least the same reasons as claim 1, and for the specific elements recited therein. Moreover, in rejecting claim 13, the Examiner cites Lacave solely for Lacave's disclosure of Baye's theorem (See Office Action, Page 30, citing Sec. 2 of Lacave). However, the addition of Lacave does not make up for the aforementioned deficiencies of van Gelder discussed above with respect to claim 1, from which claim 13 depends. Accordingly, van Gelder taken in view of Lacave does not make claim 13 obvious. Thus, withdrawal of this rejection is respectfully requested.

VII.   Rejection of Claim 14 Under 35 U.S.C. §103(a)

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over van Gelder in view of "*Exponential Growth Rate of Dempster-Shafer Belief Function*," 1992, by Wang, et al. ("Wang"). Claim 14 depends from claim 1, and is patentable for at least the same reasons as claim 1, and for the specific elements recited therein. Moreover, in rejecting claim 14, the Examiner cites Wang solely for Wang's disclosure of a Dempster-Shafer Belief network (See Office Action, Page 30, citing Abstract of Wang). However, the addition of Wang does not make up for the aforementioned deficiencies of van Gelder discussed above with respect to claim 1, from which claim 14 depends. Accordingly, van Gelder taken in view of Wang does not make claim 14 obvious. Thus, withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the foregoing remarks, Applicant respectfully submits that the present application is in condition for allowance. Applicant respectfully requests reconsideration of this application and that the application be passed to issue.

Please charge any deficiency or credit any overpayment in the fees for this amendment to our Deposit Account No. 20-0090.

Respectfully submitted,

Date <u>13 January 2009</u>

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